Evaluating the California Trauma System

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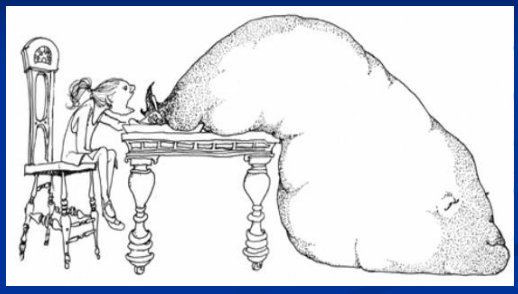
The Problem



The Realities

- Trauma system development is complex
- The process is inherently political
- There is no one "right" answer
  - There are a set of global concepts
  - All solutions are local
- Injury care is not an instinctive priority

Overview

- Review challenges on a national level
  - Policy level engagement
  - Trauma center designation
  - Scale
- How does California measure up?
- The ACS Trauma System Consultation process

POLICY LEVEL ENGAGEMENT

The obvious isn't always that obvious…

Challenges

- The general public is insensitive to the magnitude of the problem
- Political authorities have neglected their responsibility to provide services
- Research in trauma has not been supported at a level consistent with its importance
- Medical organizations have failed to educate the public and inform the Congress

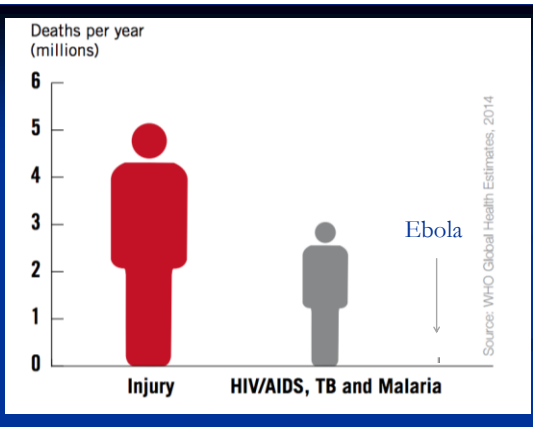
"This neglected epidemic of modern society is the nation's most important environmental health problem. "

Accidental Death and Disability: The Neglected Disease of Modern Society

National Academy of Sciences 1966

The Facts

- Injury is a major global public health problem
  - Leading cause of death for ages 15-29 worldwide
  - Leading cause of death for those under 45 in USA
  - Leading cause of loss of productivity
  - Over 300 million injuries, 5 million deaths worldwide
- Despite obvious magnitude little public focus
  - Stark contrast with other disease processes



The Neglected Disease

- In many ways, little has changed since 1966
- Lack of public awareness and engagement
  - No professional athletes wearing pink
  - No public hysteria
  - No huge contributions from private donors
- Significant progress in individual patient care
- Few stable solutions at the public health level

The Facts

- You need a mandate
  - Strong governing legislation
  - Political will to make hard decisions
- You need governance
  - An active stakeholder group with a clear vision
  - A strong lead agency with authority to lead
- You need sufficient funding
  - Infrastructure
  - Operations

How Does California Measure Up?

- Mandate
  - Statewide legislation, established standards
  - Implementation is "optional"
- Governance
  - Limited central coordination, very limited staffing
  - High variability in authority at local level
- Funding
  - Left to the local level
  - Limited state support for system operations

The Best from the Rest

- Mandate
  - Strong enabling legislation, participation mandatory
  - Grass roots support built through broad campaign
- Governance
  - Lead agency has enforcement authority
  - Lead agency has political support for action
- Funding
  - Specific allocation for trauma system operations
  - Financial incentive for hospitals and providers

TRAUMA CENTER DESIGNATION

Government of the orioles by the foxes and for the foxes must perish from the earth.

J. Thurber

The Facts

- Designation should be based on system need
  - Everyone agrees in concept
  - Definition of "need" is the sticky wicket
- Lack of accepted metrics
- Lack of standards and benchmarks
- Decisions often have great financial impact
  - Lead agencies vs big health care organizations
  - Lead agencies frequently cannot effectively lead

The Facts

- Center verification ≠ Center designation
  - Verification confirms adherence to minimum standards
    - Does **NOT** mean all centers are created equal
    - Addresses "can", does **NOT** address "should"
  - Designation confirms role and function in the system
    - Verification only one factor - an entry criterion
    - Must consider need, capability, performance, other local factors
- The two are often conflicted, but should not be
- Verification substituted for designation

How Does California Measure Up?

- No routine needs assessment
- No standard metrics/process
- Clear minimum standards for center designation
- Population-based limitation on center numbers
- Designation decisions delegated to local level
  - Degree and strength of implementation variable
  - LEMSA-level agencies not always empowered
- Overall ability to enforce is limited

The Best from the Rest

- Periodic needs assessment
  - Consensus-derived metrics
  - Transparent process
  - Designation granted only if need demonstrated
- Lead agency has legal and operational authority
  - Decisions may be contested
  - Legal authority and process can be upheld

SCALE

The Facts

- The best geo-political unit not established
  - Must be big enough for resources and governance
  - Must be small enough for one model to fit
- National mandate and standards would be ideal
  - No consistent Federal interest
  - Too large to provide operational structure

The Facts

- The state is most common
  - Typically have ability to regulate and centralize
  - Vary tremendously in size and resources
  - Large states usually need internal regions
- County-level systems among the most successful
  - Small enough for one solution
  - May not have strong governance

Trauma Center Coverage

Comparison of Scale

Facts

- Inherent balance between
  - Central standards
  - Local control
- Underlying social structures have an impact
- Political philosophy has an impact

How Does California Measure Up?

- State sets standards, but control is regional/local
  - Too large for anything but a regional approach
  - LEMSA's are highly variable in capability and focus
- No state mandate or enforcement
- Result is a patchwork
  - Areas of excellence
  - Areas with minimal development

The Best from the Rest

- State level central mandate and guidance
  - Center designation
  - Field triage and EMS destination
  - Quality improvement
- Strong regional structure
  - State-level funding for infra-structure
  - Big enough to have resources and vision
  - Relatively uniform in geography/demographics
  - Delegated enforcement authority

Observations

- System development is a huge undertaking
- It takes a long time – can outlive the solvers
- Progress frequently stagnates
  - Stakeholder frustration
  - Loss of volunteer leadership
  - Loss of shared vision
- Progress may be lost over time
- Some periodic re-kindling of energy is needed

HOW DO YOU CONTINUE TO MAKE PROGRESS?

One potential approach…

Melinda Mae

Have you heard of tiny Melinda Mae,
Who ate a monstrous whale?
She thought she could,
She said she would,
So she started in right at the tail.

And everyone said, "You're much too small,"
But that didn't bother Melinda at all.
She took little bites and she chewed very slow,
Just like a good girl should...

...And in eighty-nine years she ate that whale
Because she said she would!

Shel Silverstein

THE TRAUMA SYSTEMS CONSULTATION PROGRAM

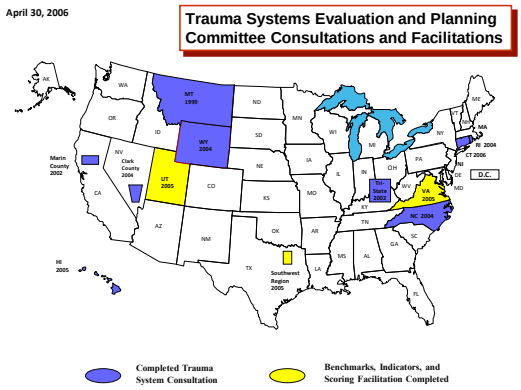
A short course in whale-eating.

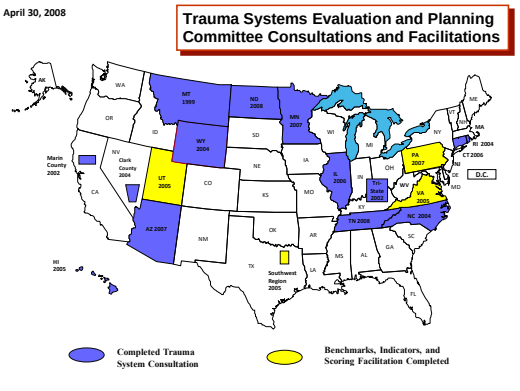
Background

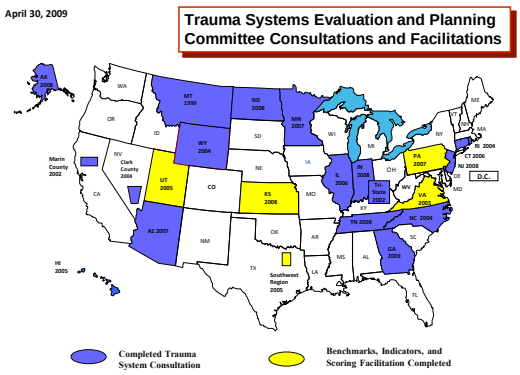
- Trauma Systems Evaluation and Planning Committee – Established in 1992
  - Four chairs, three with roots in San Diego
- Trauma Systems Consultation Program
  - Initially modeled from center verification
  - Development of standards problematic
  - Focus shifted to consultation rather than verification
  - Strategic and tactical aid in system development

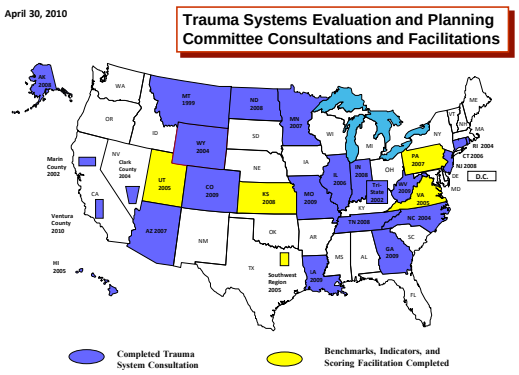
Background

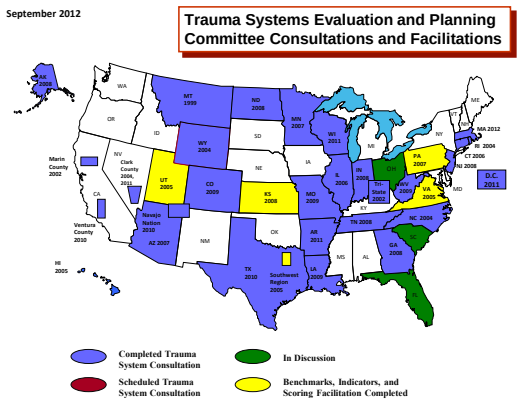
- Current initiatives of the TSEPC
  - Consultative visits
    - Comprehensive regional (usually state) visits
    - Problem-focused analyses
  - Trauma system benchmarking
  - Trauma system advocacy
  - Trauma system research
  - International collaboration

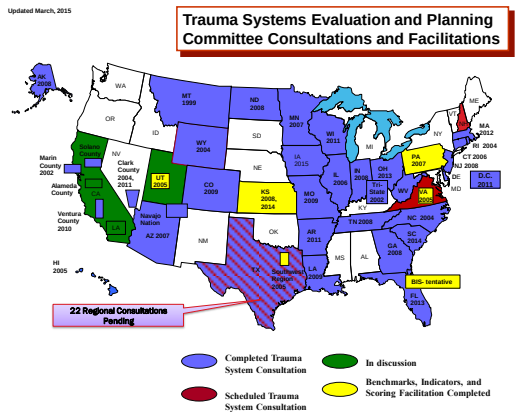












System Consultation

- Consultation, not verification
  - No external standards or "grades"
  - Seek to facilitate collaborative solutions
- Multi-disciplinary team, tailored to needs

Lead surgeon	Second surgeon
ED physician	Trauma program manager
State EMS director	ACS consultants, usually 2
ACS staff	Observers

System Consultation

- Typically a four day visit
- Data collected through:
  - Review of pre-visit questionnaire
  - Review of other available data
  - Interactive sessions with stakeholders
- Recommendations derived by team consensus
- Based on an inclusive public health model

OUR PRIORITY:
THE BEST INTEREST OF THE PATIENT

Process

- Evening of day one and all of day two
  - Stakeholder meetings
  - Question/answer and discussion
- Day three and morning of day four
  - Team deliberation
  - Development of initial recommendations
  - Report drafting
- Afternoon day four
  - Exit presentation
  - Preliminary findings

Process

- The next six weeks
  - Further team deliberation
  - Refinement of recommendations
  - Report writing
- Approximately six weeks after visit
  - Preliminary report to state for fact check
- Approximately eight weeks after visit
  - Final report to state.

Observations

- It is a consultative process that generates dialog
  - Recommendations are based on broad general principles and experiences in other regions
  - Solutions will be unique and specific to California
- Change is always difficult
- Progress requires negotiation, commitment, and collaboration from all stakeholders
- The solutions will be created by all of you
- Audentes fortuna iuvat

Thank You

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